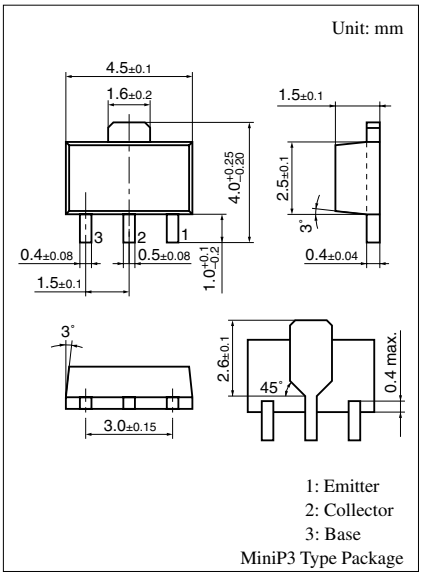
2SB1614

Silicon PNP epitaxial planer type

For low-frequency amplification



Marking Symbol: 2K

■ Features

- Large collector power dissipation P_C
- Low collector to emitter saturation voltage $V_{CE(sat)}$
- Mini power type package, allowing downsizing and thinning of the equipment and automatic insertion through the tape packing

■ Absolute Maximum Ratings $T_a = 25°C$

Parameter	Symbol	Rating	Unit
Collector to base voltage	V_{CBO}	−20	V
Collector to emitter voltage	V_{CEO}	−20	V
Emitter to base voltage	V_{EBO}	−5	V
Peak collector current	I_{CP}	−2.4	A
Collector current	I_C	−2	A
Collector power dissipation *	P_C	1	W
Junction temperature	T_j	150	°C
Storage temperature	T_{stg}	−55 to +150	°C

Note) *: Printed circuit board copper foil for collector portion area: 1.0 Cm^2 or more, thickness: 1.7 mm

■ Electrical Characteristics $T_a = 25°C \pm 3°C$

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Collector cutoff current	I_{CBO}	$V_{CB} = -7$ V, $I_E = 0$			− 0.1	μA
Collector to base voltage	V_{CBO}	$I_C = -10$ μA, $I_E = 0$	−20			V
Collector to emitter voltage	V_{CEO}	$I_C = -1$ mA, $I_B = 0$	−20			V
Emitter to base voltage	V_{EBO}	$I_E = -10$ μA, $I_C = 0$	−5			V
Forward current transfer ratio	h_{FE}	$V_{CE} = -2$ V, $I_C = 200$ mA	200		800	
Collector to emitter saturation voltage	$V_{CE(sat)}$	$I_C = -1$ A, $I_B = -20$ mA		− 0.15	− 0.25	V
Collector output capacitance	C_{ob}	$V_{CB} = -6$ V, $I_E = 0$, f = 1 MHz		68		pF
Transition frequency	f_T	$V_{CB} = -6$ V, $I_E = 50$ mA, f = 200 MHz		60		MHz

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